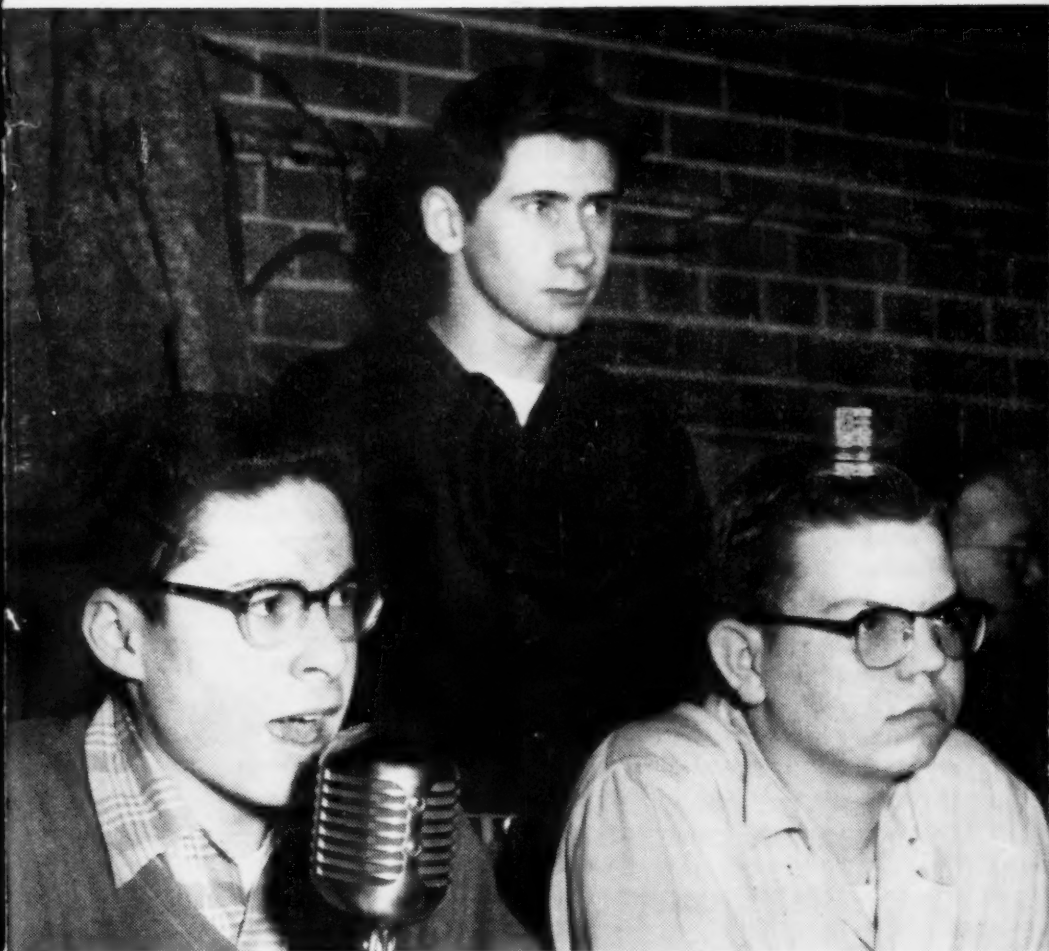




JOURNAL

Formerly the AERT JOURNAL

MARCH 1958



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Teachers Meet via TV . . . p. 6





Among participants in the Aviation Series on KTCA-TV, Minneapolis, are Dr. Hervey Shutts (left), consultant in science education, Minneapolis Public Schools; and Dr. Roland Spaulding, professor of aeronautical education, New York University. (See "Teachers Meet via TV," page 6.)

ON THE COVER: KBPS high-school student sportscasters cover an interscholastic "game of the week" in Portland. (See "The Second Oldest," page 10.)



THE NAEB JOURNAL

Vol. 17, No. 6

March 1958

The NAEB JOURNAL, combined with the AERT JOURNAL, published monthly except June, July, August and September by the National Association of Educational Broadcasters. Business and editorial offices, 14 Gregory Hall, Urbana, Illinois. All business and editorial copy, and all subscriptions, should be sent to 14 Gregory Hall, Urbana. Entered as second-class matter November, 26, 1956, at the post office, Urbana, Illinois under the act of March 3, 1879. The National Association of Educational Broadcasters is incorporated under the laws of the State of Illinois as a non-profit organization for the purpose of furthering the use of radio and television for education. Subscriptions \$4.00 a year.

Patronage and the Networks

A proposal to encourage quality in commercial dramatic programs

● A HIGH percentage of the world's great art was produced under some system of patronage. In a patronage system, the artist is directly accountable only to an individual, or a small group. So long as he meets the expectations of the patron, the artist is free to explore, to lead popular tastes instead of following them. This is in sharp contrast to the present system of supporting art through a box office, audience ratings, or some other direct method of immediate popular approval.

It is a commonly held belief that the pursuit of ratings, over a period of time, tends to lower the artistic standards of network radio and television programs. The present discussion will be restricted to network dramatic programs. And to anyone who enjoys high quality

drama, network television can be frustrating, to say the least. Outstanding drama does appear on American television from time to time, but the frequency is not en-

By Richard L. Rider

This article is based on a thesis submitted in partial fulfillment of requirements for the Ph.D. degree in communications at the University of Illinois.

tirely gratifying. Perhaps many of the readers of this journal would agree that the incidence of artistic dramatic productions is higher on both the BBC and the CBC, both of which operate on a kind of patron-

age system. The question is, then, is some modern-day method of patronage compatible with American commercial broadcasting?

Certainly no assumption can be made that if the plan proposed here were adopted it would materially alter the total network schedule. It would be a giant stride if one series were to result, or at best one series on each of the major networks. Even before we can conclude that one series would be desirable, it is necessary to explore the possibilities and to attempt to find if some patronage system is possible, and if so, might it produce quality drama with any degree of consistency.

While investigating the principles involved in directing both television and film drama, the author explored the record of the recent network series, *Philco-Goodyear Television Playhouse*, and examined in considerable detail both a kinescope recording of the television production and the film version of Paddy Chayefsky's *Marty*. This investigation gave rise to some interesting ideas.

The *Philco-Goodyear Television Playhouse* had a unique history. No other series has developed a group of young writers to compare with Chayefsky, Horton Foote, Tad Mosel, Reginald Rose, Robert Alan Aurthur, and N. Richard Nash. The associate producers, Gordon Duff, Bill Nichols, and David Susskind, and the directors, Delbert Mann, Vincent J. Donohue, and Arthur Penn have all gone on to eminent success in television,

films, and the theatre. A reading of the published plays of Chayefsky, Foote, Mosel, and Rose¹ makes two things quite apparent.

Those who worked on the series, and the critics also, give the credit for the growth and development and the honesty of approach, both to the scripts and the production of them, to the producer, Fred Coe. The second thing to be learned from reading the published plays is that they are good scripts, eloquent evidence of the sincerity and talent that went into this series.

● THE WORKING climate which Fred Coe provided for his writers and production personnel, and his selection of talented people, set the *Playhouse* a notch above any other dramatic series which has so far appeared on TV. Unfortunately, Coe was finally replaced as the producer, and later still, the series was taken off the air. The important point here is that for a rather extended period of time Fred Coe was somehow able to keep the untalented hand and the venal mind out of the dramatic aspects of the program. Apparently the advertisers and the network had enough faith in Fred Coe to put up the money and the facilities and then let him run the show.

The detailed examination of the two productions of *Marty* also

1. Paddy Chayefsky, *Television Plays* (New York: Simon and Schuster, 1955); Horton Foote, *Harrison Texas* (New York: Harcourt Brace & Co., 1956); Tad Mosel, *Other People's Houses* (New York: Simon and Schuster, 1956); Reginald Rose, *Television Plays* (New York: Simon and Schuster, 1956).

started a consideration of some intriguing ideas. When Paddy Chayefsky agreed to the proposal by the Hecht-Lancaster Organization to film the play he insisted on doing the script himself with final decision rights on script matters. And he insisted that the talented director Delbert Mann, who had done the TV version, also direct the film. The Hecht-Lancaster firm, being a small independent company, didn't have the traditions and red tape to contend with that might have obtained if the film had been done by one of the major studios.

In view of this, it could be expected that the film would be well above average in sincerity and maturity of treatment. When the film *Marty* is compared to typical Hollywood films, it does seem more mature and artistic. In truth, it was a delightful film. However when the film is compared to the television version, some striking conclusions seem inescapable.

The TV production was decidedly proletarian in tone, quite serious in approach, and it dealt openly with the psychological problems of the play in much the manner one would expect from the description of the play given by Chayefsky.² The result was a deeply moving emotional performance.

When the play was adapted for filming, a number of scenes were added to increase the running time, but no fundamental changes were made in the story or its purposes.

The approach to the production, however, was radically different. The two main characters were recast, and the result was a more bourgeois, less serious performance that put more emphasis on the comedy and less on the psychological problems and social implications of the situation. There is definite evidence that this change in approach was initially resisted by both Chayefsky and Mann, but in the end they agreed that perhaps it was in the best interests of the film.

● THE INEVITABLE conclusion must be that the environment provided by Fred Coe and the *Playhouse* afforded a greater degree of artistic freedom than did the film industry. While the environment of the *Playhouse* may be considered atypical, the more romantic approach of Hollywood certainly must be considered as typical. Hence the question, what could be done to perpetuate working conditions similar to those of the *Philco-Goodyear Playhouse*?

There have always been, and probably will continue to be, a number of sponsors of network broadcasting who are not interested in direct product sales. These are frequently large corporations with a concern for institutional goodwill and prestige. It seems entirely possible that one, or more, such firms could be convinced of the desirability of sponsoring a long-term, high quality dramatic series. Before such an arrangement could assume the qualities of art patron-

². Paddy Chayefsky, *Television Plays* (New York: Simon and Schuster, 1955).

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Teachers Meet via TV

Minneapolis schools utilize KTCA-TV for teachers' meetings, in-service courses

● **TELEVISED** teachers' meetings and in-service courses in the Minneapolis Public Schools have extended the effectiveness of consultants and administrators and have met with the enthusiastic approval of teachers.

At 9 a. m. on September 3, 1957, Dr. Rufus A. Putnam, superintendent of schools in Minneapolis, officially opened the school year with a citywide meeting over KTCA-TV. For the first time in history, teachers and other school personnel reported to their respective buildings instead of to a central location to hear messages from the superintendent, members of the Board of Education, the Central Council of PTA's, and the Citizens Committee on Public Education.

Teachers did not have to drive or go by bus to attend the meeting at Northrup Auditorium at the

University of Minnesota. There was no traffic jam, no parking problem. When the meeting was over, teachers were at their schools ready for work. No time was wasted getting back to the buildings. Everyone had had the ad-

By **Clarissa Sunde**

*Consultant in radio-television
education, Minneapolis Public
Schools, Minnesota.*

vantage of sitting on a "front seat," which was not the case when the meeting was held in the auditorium. Everyone got a close-up of the speakers.

This meeting, which served to dramatize the advent of educational television in the community, was

just the first of a series of teachers, meetings over television. In-service courses began on September 12, 1957, and have continued on a weekly basis.

As Teachers Teach is a telecourse which enables Minneapolis teachers and principals to attend system-wide teachers' meetings and in-service courses in their own school buildings, eliminating long trips across the city to the Administration Building during the rush hours of late afternoon. Every Thursday afternoon from 3:30 to 4:00, groups of teachers gather at the television sets to hear discussions or talks, or to watch demonstrations on topics of significance to them in their work.

The saving of time and energy of teachers is an untold advantage in itself, and there are other advantages. Secondary schools close at 3:00 p. m., elementary schools at 3:15 p. m., allowing teachers 15 to 30 minutes to put aside their work, have a cup of coffee, and generally compose themselves before they sit down to view *As Teachers Teach*.

Some programs in the series are beamed to all teachers as the first teachers' meeting was; some are planned for secondary teachers in special departments; some, for elementary teachers.

The fall series of *As Teachers Teach* was devoted to the following curriculum areas:

1. The Functional Spelling Study — five meetings.
2. The Guide to Teaching Social Studies — six meetings.

● IN AN OVERVIEW of the Functional Spelling Program, the relationship of spelling to the total language arts was presented. For example, building a readiness for writing experience was a major consideration. The sequence of a spelling unit, including pre-testing, finding individual needs, studying words as a group or individually, re-testing, and recording progress was discussed. A study guide listed the dates and pertinent information about the course. After the course was completed, the elementary curriculum office sent blanks for evaluating the television presentations to all the teachers in the 45 schools participating in the functional spelling experiment. Of 535 blanks sent out, 436 were returned. Comments were almost unanimous in favor of television meetings. A few dissenting teachers felt the lack of the personal relationship which is present to a greater or lesser degree in a person to person meeting. Immediately following the television presentations, teachers had discussion periods in their own faculty groups. These discussions were more productive than they would have been in citywide or area meetings. One of the elementary curriculum consultants and a teacher from the upper elementary and a teacher from the lower elementary grades made these presentations.

The programs presenting the new Social Studies Guide were planned by the curriculum consultant in social studies, assisted by teachers from both the elementary and secondary schools. Participants



Harold J. Gregory (left), consultant in radio-TV education, Minneapolis Public Schools, introduces Dr. Tracy F. Tyler, professor of education, University of Minnesota and editor, NAEB Journal, on a KTCA-TV series designed to help teachers use radio and TV effectively.

on these programs included the superintendent, assistant superintendents, consultants in special services, teachers from the elementary and secondary schools, and university professors. Discussed on this series were the role of the social studies in the total school program, the four major objectives of the new guide, the selection and utilization of instructional resources, teaching techniques used in

the unit method, the nature of the learning process, and skills essential to reading in the social studies.

According to a survey made at the close of the series, 85 per cent of the secondary teachers favored television meetings rather than city-wide or district meetings for inservice courses, and 80 per cent want another course next year. In a survey made in the elementary

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The School and Commercial TV

● COMMERCIAL television today, in the judgment of this writer, has a significant part to play in education at all levels. And it is his contention that the existence of educational television stations does not relieve commercial stations of their educational role although it may modify that role somewhat.

Where no educational television station serves a specific area, the local commercial station has a responsibility to cooperate with and assist the schools, when requested, by making facilities available for the presentation of worthwhile programs for classroom use, as direct teaching and/or enrichment. It may also be urged to telecast college-level courses, with or without credit, to make continuation education more easily available in its service area.

When classroom lessons are telecast, they may benefit the teacher as well as the student. They can provide examples of superior teaching and serve to demonstrate the newer teaching techniques. They can also assist in introducing new curricular materials. Telecasts of college-level courses makes it possible for teachers to continue their education, both professional and cultural.

A third important service rendered by telecasting classroom lessons is to provide for parents and other citizens glimpses of what today's schools are like and what they are doing. This usually provides an effective answer to the perennial critic of the schools who leaps to unwarranted attack either through ignorance or to protect his pocketbook.

Commercial television stations may also serve other educational objectives. Sometimes selected programs may be viewed directly in the classroom or assigned for home viewing and discussed in school later. The writer has in mind programs that assist young people in dealing more adequately with a world of growing complexity; of programs introducing great men of today in a simple and intimate situation that only television can provide; of programs that make it possible for young people to witness and share in significant local, state, and national events.

Finally, the programs presented by commercial stations provide the raw material for use by the teacher in developing discrimination and cultivating good taste.

"In an average week," according to Leo Bogard in *The Age of Tele-*

Continued on page 23

The Second Oldest

Portland's student-operated KBPS begins its 36th year of broadcasting

● MONDAY, March 24, 1958, Portland schools and citizens will honor the city's second oldest radio station, KBPS, the Voice of the Portland Public Schools. Born in the Benson Polytechnic High School on March 23, 1923, nurtured by student-body funds, and tended by loving faculty hands until 1939, when the school district itself took over its administrative and financial responsibility, this unique AM radio station has maintained a steady growth-rate of educational broadcasts for three and a half decades.

Its program series, teacher-student-community planned, have developed from one hour one night a week to an FCC licensed broadcast day of twelve hours. From its morning 10 o'clock sign-on and newscasts, to its Friday night hoarse neophyte sportscasters' final football-basketball play-by-play, the station breathes learning via the

mass communications route in a merry-go-whirl of "blood, sweat and not-always-pear-shaped tones."

Completely student operated by Benson's junior and senior boys with an electrical engineering bent, the station each school day sends into the classrooms of the Portland

By Patricia G. Swenson

*Manager, radio station KBPS,
Portland Public Schools, Ore-
gon.*

Public Schools and surrounding communities, broadcasts in nearly every subject field and at grade levels. The in-school program series are carefully fashioned curriculum resource materials and are planned (several are written and produced by teachers on released time) by curriculum committees for

teacher utilization in the same manner the schools' other resource materials are conceived. Other teacher committees are constantly at work evaluating the KBPS broadcast series, keeping them "up to date," and filling in favorite series with new programs where curriculum changes have occurred. Series produced recently to fill teacher and curricular needs are *Portland, Our Town*, social studies series for third graders; *Come Be Artists*, a creative art-experiences series for grades three through five; *The Story of Number*, a challenging arithmetic series to enrich the math program for

seventh and eighth graders; and *Come Listen Awhile*, a poetry-appreciation series for the primary grades (inspired by the late Edwin Helman's WBOE upper grade series, *Treasure Chest of Poetry*).

The newest in-school program series to be aired by KBPS is *Teens Talk*. Requested for nearly five years by Portland's seventh and eighth grade teachers, this series was carefully produced to fill the need for an in-school radio program in the field of mental health. *Teens Talk* is specifically designed to help seventh and eighth grade pupils with their personal

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Pat Green Swenson checks script and music in KBPS studio control booth with student staff member Oloney Baucom.



Radio and TV Speech

A Curriculum Guide for High Schools

Third Installment

● WHAT the Teacher Should Do in Preparing a Radio Program for either a Commercial or an Educational Station.

By

Edward Stasheff

University of Michigan.

Ethel Tincher

Denby High School, Detroit, Michigan.

Edgar E. Willis

University of Michigan.

I. We must remember that the station is lending its facilities and its audience. Both should be intact after the show.

II. Get exact instructions from the station and follow them to the letter while preparing the programs at school.

A. Rehearse students *on mike*. (Use a dummy if necessary).

B. Teach members of the cast to keep their eyes on the director at all times.

C. Time program *exactly*. If 14' 30" is the scheduled time, make sure the script is exactly 14' 30".

D. If school is to supply records, make sure they are in excellent condition. If possible, get new ones to take to the station. If unable to get new ones, have the station engineer check the old ones well in advance of the show. Engineers do not like to broad-

In This Installment

What the Teacher Should Do in
Preparing a Radio Program for
either a Commercial or an Educa-
tional Station

Writing the Dramatic Radio
Script

Writing a Speech for Radio
Rules for Radio and TV News
Writing

cast scratched or distorted
records whether of music or
sound.

- E. Try to have understudies for
important roles. The illness
of a lead on broadcast day
can be disastrous to an am-
ateur cast.

III. Students should be carefully
briefed before going to the station.
What they do and how they con-
duct themselves will reflect credit
or discredit upon their school and
upon all teenagers.

IV. At the station:

- A. Arrive on time, in an orderly
fashion, for whatever studio
rehearsal is scheduled.
- B. Make sure all scripts, records,
manual sound effects, and
anything else needed are
taken to the studio.
- C. See that students write on
their scripts all special in-
structions given by the direc-
tor.
- D. The teacher should be relaxed
and show confidence in her
cast. Tenseness on her part

will be reflected in the stu-
dents' performance.

- E. See that all students not on
mike are seated, awaiting
their cues.
- F. Make sure no equipment is
handled by the students, un-
less the director asks them to
help.
- G. Assist director during re-
hearsal.
- H. Do not try to talk to the di-
rector if you sit with him in
the control room while the
show is on the air.
- I. Everyone should help with
the clean-up after the show.
1. Return all records to the
file.
 2. Put scripts in order and
staple them together.
 3. Gather up all personal be-
longings.
- J. Thank the station personnel
and leave in an orderly fash-
ion.

● Writing the Dramatic Radio Script

The class should study good pro-
fessional scripts and do some pro-
ductions before attempting to write
scripts. The careful analysis of
taped shows is helpful, especially
so when the students can follow
the script as they listen to the tape.
Point out the special requirements
for radio writing: rapid and re-
peated identification of characters,
how setting is indicated, transitions
and transition devices, restricted
number of characters, economy of
words, and use of sound effects.
Some teachers like to have the en-

tire class write one scene, using three or four characters. When this is done, the students should use one of the transition devices to transport the characters from the opening scene to the second one, where they should introduce another character. This done the class is well on the way to the writing of a complete script according to the following directions:

I. Review the tools.

- A. Speech
- B. Sound effects
- C. Music

II. Decide on a theme (the summed-up idea of what you are trying to say).

Example: "People do the craziest things to get out of an embarrassing situation."

III. Write for the ear.

IV. Begin action immediately.

V. Make the opening clear, short, and interest-provoking. You can use sound, music, speech, or a combination of the three.

Example:

ANNOUNCER: From the days
of the Cave
Man . . . to the
days of the
Space Man . . .
in 30 minutes!

SOUND: METRO-
NOME UP
FOR FIVE
SECONDS
(CROSS-
FADE
WITH)

MUSIC: UP AND OUT

VI. Establish locale or setting.

VII. Create the mood.

VIII. Identify the characters.

IX. Establish conflict.

X. For practice in word economy, try writing the opening of a script in 25 words or less.

Example:

MOTHER: (Calling) Millie!

MILLIE: (OFF MIKE) Yes,
Mother.

MOTHER: Bring me my glasses quick. I can't see who's getting out of the car next door.

MILLIE: (COMING IN)
Please, Mother!
They'll see you.

XI. Decisions to make:

- A. Decide from whose point of view the story can best be told.
- B. Should it be told in the first, second, or third person?
- C. What are the possibilities of stream-of-consciousness technique? (Usually not recommended for high-school groups.)

XII. Tips on dialogue:

- A. Use short sentences.
- B. Use simple language.
- C. Avoid long sentences if possible.
- D. Avoid long speeches.
- E. Keep characters alive by giving them lines in a scene in which they are present.
- F. Introduce characters early in

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Series I, Number 34

Experimental Study in Instructional Procedures

Report No. 2, by Miami University of Ohio, October 1957. Sixty pages with tables.

This study was supported jointly by the Miami University and The Fund for the Advancement of Education. The study was undertaken primarily for the purpose of studying the effectiveness of certain types of large group instruction, and to demonstrate the feasibility of these procedures at the college level. "An important part of the study has been the development of more nearly adequate audio-visual facilities and services and the encouragement of faculty in the production and use of improved instructional materials and equipment."

The study was carried on during the 1956-57 academic year and in-

cluded 23 separate courses, many of them taught in multiple sections; 20 different departments of the university; and an approximate total student enrollment of 4,457.

Findings and Tentative Conclusions:

1. Instructional method and facilities:

- a. Contrary to popular opinion, college professors are interested in improving their methods of course presentation, organization and student evaluation. Summer workshops for this purpose were well attended.

- b. College professors use audio-visual aids inadequately for the most part. Often the reason for this is that such aids are not readily available on the campus.
- c. Television is most economical for large group instruction or chain-instruction of small groups, i.e., a classroom network.
- d. Teaching through television is much more demanding upon the teacher than is conventional teaching.
- e. Most university classrooms are poorly suited to large group instruction.

2. Achievement:

Data for the study seemed to indicate that students in the TV sections acquire about as much knowledge of the basic subject matter as those students in the controls classes do. Subject-matter knowledge was not adversely affected by assignment to a large

class rather than a small one. Achievements of students in Geology and Economics in the TV sections seemed somewhat inferior to the conventionally taught students. The students' attitudes toward the method of instruction did not seem to influence their achievement in any of the courses.

3. Attitudes about the course and the instructor:

- a. Class size had no uniform effect upon student attitude toward the courses. Attitudes were influenced more by content and individual instructor.
- b. Student motivation and subject-matter interest did not seem to be affected whether the courses were conventional or televised, for one semester.
- c. There was a tendency for students to rate control-section teachers as more effective than TV or large-class instructors, though some in-

Continued on page 3A

structors proved exceptional to this judgment.

4. Attitudes about TV and large class instruction:

a. With the correct combination of instructor, course material, and a full use of TV potentialities, a televised course will be preferred over conventional instruction by the students. Generally, however, most students seems to prefer small (conventional) classes to large group or TV.

b. The attitude toward TV instruction as compared to control ranges from strong enthusiasm to extreme displeasure. The attitude toward large-group instruction as compared to control-group is mildly unfavorable.

c. There was pronounced tendency for students who disliked their instructor to dislike TV or large classes and vice versa.

d. Students in TV courses tend to become progressively disenchanted with TV as a means of instruction as the year progresses and more favored conventional instruction over TV instruction at the end of the second semester than at the end of the first semester.

e. Attitudes about TV and large classes were independent of the students' level of academic ability. Those who favored TV and those who did not maintained their positions at the end of the academic year.

5. Instructors' attitudes:

Most instructors who have tried TV teaching like it better than they thought they would. Though they still prefer small group teaching, they feel TV is superior to large group instruction. They generally cite two major defects: 1. The physical barrier between student and teacher. 2. The lengthy preparation time required for each TV program.

The latter defect can be eased with better load adjustments for the TV instructor. The first defect is more basic, however, and because of it there is probably a core of teachers who could never be satisfied with a transfer from the classroom to the studio.

Large-class instructors cited similar defects in their work, but did

not feel they were as bad in the large-group classes as on TV. But even these instructors reported that large classes did not give them the same feeling of personal satisfaction and accomplishment as did small classes.

—WILLARD MARRION

NAEB

Research
Fact
Sheets

Series I, Number 35

Television—Technological Revolution in Education?

By Harvey Zorbaugh. (From the Journal of the SMPTE, November 1957; Vol. 66, No. 11.)

Today there are 136 closed-circuit installations in our schools and universities; 28 educational stations on the air, 90 per cent of them regularly broadcasting instructional materials to our schools. The number is growing continually. Television is already beginning to show signs of "having become accepted and entrenched as a permanent part of the apparatus of education." The greatest impetus to television's growth in education is the impending critical shortage of qualified teachers. This shortage is estimated to reach a quarter of a million by 1965.

Television has been used to varying degrees in schools. The pattern

varies from televising what occurs in a classroom and extending it to many other classrooms; through televising a lecture-demonstration, to be followed by its discussion under the leadership of instructors in the viewing rooms; to the use of television as an audio-visual aid to the instructor in a single classroom. "But always the results are the same. When compared with the achievement of students instructed in the traditional manner, the achievement of students receiving all or part of their instruction by television is at least as high."

According to the evidence available, facts, principles, and basic motor skills can be taught to young adults as effectively by means of

television as with an instructor facing students in a classroom. The American Dental Association praised the use of television in dental schools because of its ability to give students first-hand views of dental procedures which formerly had to be repeated over and over to give the information to all the students.

There are these major technical problems: 1. The high cost of installation, 2. the need for less fragile, cumbersome, and complicated equipment, and 3. the reduction of communication between the student and the teacher during a lecture.

Educational problems range from the selection of content to the personal qualities of the instructors and from the suitability of subject matter to the size of the viewing group.

"Education is more than transmission of facts, principles and motor skills. It is also guidance in social and emotional development, in growth in maturity . . . All this takes place in interpersonal relationships, in which good teachers must always play a critical role." Wide use of television instruction will free much time of many teachers and scholars for closer, more personal contact with individual students and for research.

Alabama will start a state-wide educational network in 1958, and the Southern Region Education Board has proposed a regional network with some 60 originating studios and over 160 outlets throughout the 16 states of the southern region.

New York University's School of Education is considering using

Continued on page 3B

television so that teachers-in-training can observe demonstration teaching classes. The camera would operate behind one-way-vision glass and the picture would be relayed into a series of viewing rooms where critic-teachers could follow the procedures of the student-teacher. New York University is also toying with the idea of using a

television camera on a track which would move around in the laboratories and allow an instructor to aid students and observe their work from a central receiver. Education is truly undergoing a technological revolution.

—WILLARD MARRION

Series I, Number 36

The Relationship of Teaching Effectiveness to Class Size and Method of Instruction

*By Vernon Davies, Edward Gross, and J. F. Short Jr.;
Department of Sociology, Washington State College, July
1957. Fifty-two pages including tables of results.*

This project, financed by the Fund for Advancement of Education, takes the form of two experiments. The first experiment took place in the Fall Semester (1956-57) and examined the effect of class size on teaching effectiveness. The second experiment took place in the Spring Semester (1956-57) and examined teaching technique. Both experiments were performed with classes of introductory sociology.

"The situation leading to the experimentation was the growing feeling that steps must soon be taken to prepare for the impending sharp increase in college enrollments. Enrollments in the Intro-

ductory Sociology course at Washington State College are among the largest on the campus. It was felt that a crucial situation would exist for this course unless something were done to anticipate the prospective sharply increased influx of students."

In Experiment One, the subjects were all first semester freshmen who were enrolling in an introductory sociology course. The authors of the report were the instructors in the classes used in the experiment (also in Experiment Two). There were 124 students in the three classes taught by the authors. In order to achieve more valid results, certain controls were

employed. This was the initial exposure of all the students to the major concepts of introductory sociology; the three test groups were matched by achievement and ability; the classroom's physical aspects, reading assignments given and hour for the class meeting were all identical; and finally, the degree of teaching of the instructors was matched equally.

Three basic techniques were employed in the instruction: conventional teaching, use of visual aids, and class discussion. While none of these was used exclusively by any of the instructors, each instructor stressed the use of one method in particular. For visual aids, some 800 slides and various films were used.

Findings:

1. The size of the class was not related to student achievement.
2. Attitude toward the instructor was least favorable in the medium-sized group. (The

authors suggest that perhaps the members of the large and small groups were more aware that they were special cases and attempted to give the interviewer the attitudes he wanted, i.e., those favorable to the situation as seen by the student.)

Students can be said to react to a college course in a manner which is a composite of such factors as the personality of the instructor, the subject matter and the method of teaching. As a comment on the method of teaching which incorporates slides, the authors remark that only slides with a considerable amount of intrinsic interest should be used.

In Experiment Two, similar controls as used in Experiment One were maintained, but the size of each group was held constant at 20. Only 60 students were represented in the classes of the authors during the second experiment. Each instructor used all three techniques — lecturing, visual aids,

Continued on page 3C

and closed-circuit television — in teaching his class. In the televised classes, a two-way microphone set-up was used. This enabled the instructor and the students to exchange questions and answers.

The mean scores for the matched groups for each of the instructors were nearly identical. The data, therefore, do not support the hypothesis that achievement is affected by the methods of instruction employed in the experiment.

The instructors were somewhat ill at ease at not having an audience in the studio to stimulate them during televised portions of the class instruction. The presence of the technical people of the studio staff also was distracting for them. In general the attitude toward using television was accepted. "One may speculate on a future in which TV will be used much more than it is at present as an educational device . . . Of course, this procedure is expensive, but it is considerably less expensive than building new classrooms, stocking new libraries and building new dormitories."

Findings:

1. Teaching technique was not found to be related to student achievement.

Implications of the study:

The findings do not support the claims that students learn subject-matter more efficiently in small classes, and suggest, therefore, the desirability of subjecting such a statement to scientific test. The same may be said for the statement that students cannot learn as well with television as in the ordinary classroom with the teacher present.

"The experiments did not indicate that attitudes of the students polarized consistently in any meaningful manner. If anything, the attitudes seemed to be a function of the group rather than a composite of individual opinions."

A very detailed account of methods and general reactions of the participants is presented in the full report.

—WILLARD MARRION

NAEB

Research
Fact
Sheets

Series I, Number 37

The Utilization of Audio-Visual Aids in the General Chemistry Laboratory Work at Purdue University

By J. M. Honig, Department of Chemistry, Purdue University, May 1957. Forty-two pages including samples of questionnaires and tables of results. (Final report to the Fund for the Advancement of Education.)

The program of using audio-visual aids in chemistry courses at Purdue was experimented with to offset the shortage of technical instructors in the university's chemistry department. This report is based upon data collected during the experimental period — Fall 1956 to June 1957.

The coursework and lectures are planned and given exclusively by staff members of professorial rank. Recitation and laboratory instruction is handled by graduate assistants. It was thought that the use of television might lead to more effective utilization of graduate student help. Staff members were asked on a volunteer basis to help

in the preparation of material to be shown. Later, professors acted as each others' critics for methods of presentation, pointing out weaknesses observed.

Black-and-white film presented over TV, live television broadcasts, color films with sound, color slides with tape narration, and supplementary mimeographed instructions were some of the aids used. The mimeographed material was distributed one week in advance of class schedule. While all of these various methods were tried the first semester, during the second semester more emphasis was placed upon television. The various aids used the first semester were to

acquaint all the participants in the experiment with the various media of mass communications and to note their utility as teaching aids. Television proved the most flexible and, accordingly, more emphasis was placed on its use.

One important difficulty encountered was in the preparation of the visual-aid. It was hard to avoid divulging the course of an experiment while explaining the functioning of the chemistry equipment.

Those individuals who were assigned to work stations within the TV-equipped laboratories received all instructions prepared for presentation on the audio-visual aids. The remaining students were taught in the conventional manner and served as control groups.

Students in the TV-equipped labs ultimately realized they could depend on class instructors for the desired information, and tended to pay less attention to the audio-visual aids. When this became known, two of the three class-lab assistants

were removed to a stand-by position. This move resulted in the availability of some 800 man-hours which could be utilized in other various manners.

In the first semester of the experiment, the program emphasis was primarily on experimental methods and the manipulation of equipment. In the second semester, students were assumed to possess requisite manipulative skills. Accordingly, a larger share of audio-visual instruction time was devoted to a discussion of the theory and background material. Student and faculty reaction was measured by means of five questionnaires, and student learning was gauged through the use of comparative test scores.

Results of Questionnaires:

A. Students:

1. Most of the students (87 to 99 per cent) indicated they required no more than a moder-

Continued on page 3D

ate amount of help beyond that provided by the audio-visual aids.

2. Only 1 to 6 per cent felt that a second showing of the material would have been desirable or necessary.
3. General reactions to the experiment indicated neither the TV nor the conventional method of teaching was more desired by the students.
4. Close-ups of the experimental equipment could be adequately viewed even at a distance of 22 feet from the television receivers. Items such as scale markings, electrical connections or processes, and gradually occurring chemical changes could be seen very clearly.
5. Most students thought the pacing of the presentations was satisfactory, although most staff members felt it was "agonizingly slow."

6. Most students thought the slide material was useless or inadequate after viewing TV presentations of this same material.

7. Most of the students (82 to 96 per cent) reported they were able to perform the experiment with only a minimum of supplementary help from the lab instructor after having been provided with the audio-visual material.

B. Instructors:

1. A majority of the instructors felt that the TV sets should be moved out of the lab. Only few felt that the repetition of the program was desirable.
2. A majority of the instructors felt they could easily handle a group of 70 to 100 students in the lab after the students had seen the audio-visual material.
3. A majority of the instructors

felt that student note-taking should be "enforced" to avoid their repeating material presented over the aid.

4. Instructors became more enthused with the use of audio-visual aids after they worked with them for a while.

Both the experimentally and the conventionally taught students attained scores of approximately equal value. In the second semester, the groups receiving audio-visual instruction seemed to achieve *slightly* better scores than the conventionally taught students. The impression gained was that there

was an overall improvement in the quality of laboratory instruction. The lab instructions were more uniform because one member of the professorial staff was able to take the place of six laboratory assistants.

"No unique features were associated with the pilot program at Purdue University, which would seem to preclude its adoption at other institutions. Likewise, there is no reason to expect that the present results could not be duplicated or improved upon elsewhere."

—WILLARD MARRION

NAEB

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Series I, Number 40

Television in Washington County Schools, Hagerstown, Maryland

*By John R. Brugger. (From the Journal of the SMPTE,
November 1957; Vol. 66, No. 11.)*

The purpose of the Washington County closed-circuit operation is to determine the effectiveness of this medium in reducing some of the many administrative problems confronting our school systems today. The five-year project began with the opening of the 1956 school term. The project involves some 6,000 students in 12 grades. Three operating studios, 13 studio teachers, three operating channels, and some 13 miles of cable joined eight schools in televised direct instruction.

These were some of the initial findings:

1. There seems to be greater attention given by the students

to the televised lesson.

2. Emphasis is placed on fitting TV to teaching rather than teaching to TV.
3. Better instruction is indicated through use of TV by scores on examinations and growth of learning comparisons.
4. The medium lends itself well to a teaching situation.

The program at present is distributed to 23 schools, but during the summer of 1958 it is planned that the project enlarge its scope to 48 schools in Washington County.

A "consideration which should not be overlooked is the fact that students viewing in schools have

already become acquainted with commercial broadcast television, and whether educators wish to accept the technical quality of such operations or not, students are well conditioned to a transmission quality which has, perhaps without meaning to, set the standard." The programs of the educators must be as technologically acceptable as those of commercial stations. The comfort of the viewer and the operation of the television set in the school must be taken into consideration. Large-screen projectors may well serve larger viewing groups.

Telecasts usually consume one half of the regular class meeting time. The other half of the class time is used by the classroom teacher to pursue the subject matter, answer individual questions, and continue the discussion.

Whether the instruction by television is directed to specialized groups or to general student bodies, the following attributes are noted:

1. The student's interest *can* be maintained. Interruption of the televised instruction for group discussion has even heightened interest.
2. More subject material can be presented due to better planning and preparation than normal classroom teaching requires.
3. Students have the benefit of dual instruction—two teachers.
4. TV avoids the awkward mechanical details of classroom film projection.
5. Better use can be made of films in closed-circuit operations.

As yet, there has been no use of two-way talk systems at Hagerstown, but the classroom teacher is always present. The students view the TV instruction about 60 minutes daily. Two such broadcasts

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are the limit, i. e., two 30-minute portions.

In the high school, the courses offered are general science, geometry, U. S. history, and 12th grade English. The classes run 60 minutes, half of which is televised, half of which is class work. Classroom teachers and TV teachers decided at the beginning of the project exactly how they would present the material. This allowed the teachers to cover the various subjects thoroughly and at the same time coordinated their teaching efforts. In addition to this, there is also a "coordinator of instruction" who makes certain that the basic requirements of the courses presented are included. A second person studies curriculum, makes sure

that it is up to date, and advises teachers of new books available on the subject taught.

"Other educators have mentioned the fact that they expect to pay a premium for the studio teacher. This is not our policy. Our opinion is that the classroom teacher is as important, perhaps more important, than the studio teacher. The classroom teachers are the ones working directly with the students. The studio teacher merely presents the material; the classroom teacher still moulds the personality, develops and stimulates students' thinking and is a very important part of the teaching process."

—WILLARD MARRION



Series V, Number 3

The Perceived Appeals of Television Program Content

By Richard F. Carter. Research Bulletin No. 8, published by the University of Wisconsin Television Laboratory, September 1957.

This report represents a second of three reports making up a detailed analysis of the expected reaction of an adult audience to various types of program content. The report deals specifically with the question: "What types of program content seem to have similar kinds of appeal to the audience?"

As an introduction to the study, Carter cites the studies of other communication researchers in the area of content. Among those mentioned are Lazarsfeld and Kendall; Nafziger, MacLean and Engstrom; Dallas Smythe; Dorothy Jones; and Bernard Berelson. Carter explains how the Wisconsin study differed in method from that of these other researchers.

In doing the study, the TV Laboratory made this assumption: "People living in the American culture will have similar perceptions of appeal in television program content. Because they are exposed to the same kinds of media content, and often share common goals in life, they will have essentially similar perceptions of the common appeals in television program content."

The responses to 76 types of television program content were gathered from a sample audience consisting of residents 16 years of age and older in the city of Stoughton, Wis. Stoughton was chosen because of the similarity between its

population and the nation's population, as a whole, particularly with regard to sex mixture, age range, and educational level. The tests were conducted during January and February of 1955.

The 76 types were separated into nine categories by the study:

- I. A general category (not described).
- II. Information or entertainment which is removed from the day-to-day sphere of the prospective viewer and which does not imply any active participation on the part of the viewer.
- III. Information or entertainment which is close to the day-to-day sphere of the prospective viewer and which does imply some participation on the part of the viewer — though not necessarily while viewing.
- IV. Content which is far removed in time and place from the viewer, particularly when the presentation is dramatic.

V. Sports entertainment, which includes such music and acts as usually occur at sporting events.

VI. Aesthetic entertainment: content which deals with classic themes.

VII. Pageantry or mundane: content which is glamorous versus content which is down to earth.

VIII. Personal adjustment information (direct or indirect) versus non-personal pictures of the world, where "pictures" is not taken literally.

IX. Fun, particularly humorous entertainment.

A second-order factor analysis revealed that these nine categories could be included within *three larger classes*:

1. Generalized gratification versus particularized gratification.

Continued on page 3F

2. Content which is not person-oriented (and which tends to be external to the viewer's person) versus content which is person-oriented and close or internal to the viewer's person.
3. Content which stresses self-concern on the part of the viewer versus content which stresses non-concern.

"From this report, the television producer may extract information of immediate utility, e.g., that certain program content types have the same appeal and might well be consecutively scheduled to *hold* an audience. A station which is trying to *amass* or *serve* an audience of all kinds of people might use the knowledge of content appeal similarities to sample program content from all the significant areas."

Taking the results of this study, Carter suggests four major areas of investigation which might be pursued:

1. Coordination of "factors of appeal" with relevant concepts, such as observed dimensions of content appeal, interest, or attention in other media; group memberships, attitudes, personality characteristics; and with observed media behavior.

2. A study of the differences in perceptions of "homogeneity of appeal" among content types as functions of perceived appeal levels, group memberships, and personality characteristics.

3. Hypotheses based on the derived factors as to expected consequences in terms of programming, or in terms of replication in different media content areas or for different audiences — say, a study of perceived content appeals in Great Britain where another cultural milieu for television exists.

4. As controls in experimental studies designed to evaluate the effects of non-content variables. (These results, for instance, indi-

cate where seemingly similar content types are quite different in their appeal and should not be used as equivalent stimuli.)

This report explains step-by-step the method used to carry out the study. Meticulous attention is given to each detail. Charts of results and samples of the materials used,

including the list of 76 program types, are also presented in the 179-page report.

This report should be of particular interest to those researchers interested in *methods* of communication research.

—WILLARD MARRION

NAEB

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Series V, Number 4

Instructional Broadcasting Developments

Report on the NAEB Study Group, as presented at the NAEB convention in St. Louis on October 30 and 31, 1957.

Dr. Clifford Erickson, assistant dean, TV Education, Chicago Junior College:

The Chicago Junior College of the Air, under the supervision of the Board of Education in Chicago is offering nine courses over the educational station WTTW. It is a three-year project, and this year about 11,000 students are enrolled, nearly a quarter of them for college credit. During the first semester, when four courses were offered, 61 per cent of the students completed the course. The second semester, 71 per cent completed the course.

Dr. F. G. Macomber, assistant provost, Miami University of Ohio:

Administrative Problems of TV Teaching:

1. How much credit on total teaching load should an instructor receive for teaching a course through television? Under what circumstances should an assistant be assigned to him? Dr. Macomber feels that an instructor can do a really good job only if he spends his entire time at it.
2. We need carefully made cost studies of televised teaching. Comparing present TV teaching costs with conventional classroom method costs indicates "... that we can afford

to teach through TV only those courses of considerable enrollment unless we find ways and means of developing university networks with the instruction in a given course originating from one university."

3. We need more adequate facilities for receiving televised instruction. Most rooms now used are makeshift. They are either too large or too small. The ventilation and lighting are unsatisfactory also. We need rooms where material to be presented can be rehearsed in addition to classrooms.
4. With the increased enrollments, off-campus TV teaching, originating from colleges and universities, might lessen the strain on overcrowded campus facilities.

Dr. H. M. MacNeille, Mathematics Department chairman, Washington University:

Washington University teaches 30 sections of Math 115 and 116

over the facilities of Station KETC-TV in St. Louis. The class is telecast over KETC at 3 and 7 p.m. and repeated the following day by closed-circuit TV on the campus. The cost of this operation, based on 6,000 semester hours of instruction annually, is \$12.65 per semester hour of instruction. "The conclusion which we have drawn is that the improvement in grades represents a bonafide improvement in performance and that there has been no slackening of standards."

Mr. John Brugger, chief engineer, Washington County Public Schools, Hagerstown, Md.:

The general procedure in the Hagerstown project is that 50 per cent of the class period is televised. The remainder is handled by the classroom teacher. The program, as presently set up, has limited each student to only one TV class per day. Presently, 12,000 students have TV available to them in 23 schools. Future plans call for TV in 48

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schools, reaching some 20,000 students.

Mr. Franklin Bouwsma, executive secretary, Detroit ETV Foundation (station WTVS):

Station WTVS, in cooperation with Wayne University and the University of Detroit, presents the entire curriculum of the first semester for freshmen in the Liberal Arts College. Nine additional credit hours are available during evening telecasts. The freshmen courses are televised during the day. Students at home come in once a week to meet with the teacher for 15-minute periods. Assignments and quizzes take place during this period. Tuition arrangements at Detroit are "unique." The university encourages a second all-channel television set in the home to be used strictly for the classes. At registration a list of TV dealers is distributed for those students who wish to purchase sets. The university deducts the cost of the set from the student's tuition. If the student prefers to merely convert his existing set so that he

can receive the university UHF station, this can also be deducted from the total tuition cost. In addition to the TV courses, the University of Detroit also programs some 57 credit courses on radio. The radio programs include English, sociology, and anthropology.

In a question and answer period following the presentations, the speakers said that the best way to eliminate the hostile reception of TV by the instructional staff was to "cultivate department heads." Educators were encouraged to try and get their instructors free to do *only* TV class work. A system of remuneration for TV work was also suggested as a possible method.

Purdue University has made a study of rooms that are best suited for the reception of televised courses and when questions concerning this were asked, Mr. James Miles of Purdue told delegates that copies of this research report were available.

—WILLARD MARRION

Series VI, Number 8

The Hurt Mind— An Enquiry into Some of the Effects of Five Television Broadcasts about Mental Illness and Its Treatment

*By William A. Belson, Audience Research Department,
British Broadcasting Corporation, London, 1957. Belson
is now a staff member of the London School of Eco-
nomics.*

This study deserves attention because it attempted to (1) provide research data for planning and (2) measure the effects of an educational television series devoted to one of the major social problems in contemporary Western civilization.

PROBLEM:

Measure the effect of a series of five half-hour television programs entitled *The Hurt Mind*, broadcast Tuesday evenings, January 1-29, 1957, as follows:

1. To what extent the series had affected viewers' knowledge of and ideas about mental illness.
2. In what way it had affected viewers' confidence in the ability of medical men to cure mental illness.
3. In what way it had affected viewers' willingness to accept back into society (as a normal person) the ex-patient of the mental hospital.
4. In what way the series had affected viewers' attitudes toward the mentally ill.
5. To what extent the broadcasts increased awareness of mental illness as a social problem.

METHOD:

1. A planning study was conducted by interviewing at Broadcasting House 180 TV set owners from the Greater London area in four groups of about 45 each. The series *The Hurt Mind* was developed with the results of the planning study in mind.

2. Measurement of the effects of the series was based upon answers to an extended questionnaire given by 449 viewers who had seen one or more of the five programs as compared with 321 persons who had not seen the series.

3. These two groups were matched according to age, sex, and social class with the audience throughout Great Britain which actually saw the program.

4. It was hypothesized that only part of the differences in reply between viewers and non-viewers could be attributed to program effects. The remainder of the differences would be accounted for by differences between viewers and

non-viewers which were not related to the effects of the broadcast. The "stable correlate method" was used in an attempt to eliminate these remaining differences.

RESULTS:

1. According to a continuing BBC audience survey each of the *Hurt Mind* broadcasts had an audience considerably above the average for talk and discussion programs broadcast during the preceding quarter.

2. The results of the enquiry were summarized as follows:

- a. It increased somewhat viewers' knowledge on the subject of mental illness, especially in respect of methods of treatment.

- b. There was a moderate but broadly based increase in viewers' confidence in the ability of medical men to cure mental illness. In this, there were appreciable increases in viewers' confidence in the usefulness of certain kinds of treatment, namely, elec-

tric shock treatment, leucotomy, abreaction, group therapy.

c. There was a small but well-spread increase in viewers' willingness to associate with the ex-patient or with the person who is at present receiving treatment for a mental illness, though the series did little to reduce the proportion who would not be willing "to employ" the ex-patient.

d. There was a small increase in the large number who readily think in terms of "medical treatment for mental illness," and a slight reduction in the large majority holding that treatment for mental illness is something to keep fairly quiet about.

e. It increased somewhat the public's feeling of sympathy and pity for the mentally ill and produced also some increase in the public's insight into the condition of the mentally ill.

f. The series increased from 5 per cent (before) to 10 per cent (after) the proportion actively

aware of mental illness as a major social problem.

COMMENT:

1. Assuming the validity of the study, this series of only five broadcasts appears to have been remarkably successful in imparting information and in shifting attitudes in the desired direction.

2. The research design of this study is particularly worthy of consideration because it indicates so clearly the hazards in research on broadcast effects.

a. A "before and after" survey design is likely to bias the results because of the effects of the "before" testing on the respondents. Indeed there are few situations in which the researcher is able to know in advance the exact program content; and without this information, it is impossible to construct a "before" text.

b. While fairly new to broadcast effects studies, the "after

only" design employed here is well known and often used in social science research. However, this reviewer believes this design is not generally considered at present an ideal solution to problems of this type.

c. Perhaps the major difficulty of the "stable correlates method" of eliminating differences in response not directly attributable to the effects of viewing is that the investigator has no means of satisfying himself that he has included the best predictors among his original subjective list of possible matching criteria.

On the other hand, according to Dr. Charles H. Proctor of the De-

partment of Statistics at Michigan State University, despite the above difficulty in its use, the "stable correlates method" remains one of the few instruments available which can help in diagnosing apparent effects which otherwise may not be explainable.

3. The investigator (William A. Belson) responsible for the research on *The Hurt Mind* has indicated acute awareness of the above hazards. They were stated in order to alert the reader to some of the kinds of problems involved in broadcast-effects research and to enlist the reader's sympathy on behalf of investigators working in this field.

—IRVING R. MERRILL

Book Review

Closed Circuit TV Systems Planning, by Morris A. Mayers and Rodney Chipp. New York: John F. Rider Publisher, Inc. 223 pp. \$10.00.

Here is an excellent source of information for those charged with the responsibility of planning a closed circuit television system. This is not an engineering nor a technician's text but is a book written especially to give management the facts. At times the discussion becomes pretty technical, however this is necessary to explain the types of equipment its advantages, disadvantages, and limitations.

This book is divided into three parts: applications, how it works, and equipment. Following the introductory section of Part I, "Applications," there are 21 different categories in which examples are given of the use of closed circuit TV. Most of these have at least one illustration which shows camera placement and a view of the associated monitor displaying the picture. To quote from this chapter, "It has been said that use of television is indicated whenever it is too dangerous, difficult, expensive, inconvenient, inaccessible, tiring, far, hot, cold, high, low,

dark, or small to observe directly." A chart is given which includes 111 applications where television might be employed in one or more of 20 different ways.

The use of CCTV in education is discussed under medical education both for undergraduate and postgraduate work, and general education. Under the general education section, the Penn State experiment is covered in some detail as well as use of television at Kansas University Medical Center, Case Institute of Technology, and Stephens College. Other installations treated briefly are at Idaho State College, the Washington County (Hagerstown) experiment, and Chicago Teachers College. Two diagrams of installations in use at Penn State are included.

Part II, "How it Works," might be summed up in the opening sentence of this portion of the book: "To understand the operation of closed circuit or wired television, one must have a working knowledge of the underlying principles on which all modern television is

based." That is just what the authors proceed to do in a manner which we believe will be understandable to persons without technical training. Scanning, synchronization, operations, transmissions, and reception are covered to give the reader an idea of how the system works and the reasons for the employment of certain types of equipment. The difference between a monitor and a television receiver is discussed as well as the use and limitations of TV projectors.

The discussion of the relation of picture quality of the equipment versus its cost is of value especially to those who are responsible for the purchase of closed circuit equipment. Six factors are considered in this evaluation: linearity, gray scale and contrast, fine detail or resolution, over-all brightness or luminance, noise, and color. One more factor, flexibility, might have been added which adds to the cost of the equipment. Certainly the professional or broadcast type of equipment incorporating an electronic view finder and a lens turret is indicated in most educational applications. In many applications for teaching, a single lens camera without a view finder simply will not provide the flexibility required to achieve the results desired.

Part III, "Closed Circuit TV Equipment," is a quasi-technical discussion of closed circuit systems beginning with a treatment of scanning standards. Since the total amount of information that can be transmitted in a given amount of time is directly related to these

standards, this is one factor in the cost and complexity of the equipment. Optics are next covered briefly with tables provided to enable the selection of the proper focal length lenses to cover a given horizontal field of view.

Since the cost of the system is influenced also by the pickup tube used, the three camera tubes in most general use today are discussed: the image orthicon, the image dissector, and the vidicon. The operation of each of these is outlined in detail in conjunction with a simplified sketch of the tube. The advantages and disadvantages of each type are stated. In the section on lighting, some general rules are given for estimating light requirements as well as a brief general discussion of lighting principles and equipment.

The next section discusses cameras and control units for both live pickup and film. Illustrations are provided to show many examples from the 20 models of television equipment available from a single unit industrial camera to a three image orthicon color television camera. Video recording is given a brief mention. The concluding sections of Part III provide brief coverage on switching, audio, transmission and distribution, display devices, both direct view and projection, camera accessories such as remote controls, and special housings and mountings. The last section points out the necessity for maintaining the equipment to assure good performance and lists minimum test equipment require-

TV in Teacher Training

San Jose (California) State College began in February an \$88,000 pilot study to determine whether television teaching is one of the answers to the overcrowded classroom. The study involves the use of some \$60,000 worth of TV equipment for college and elementary classrooms, 21-inch screen TV sets, and small stationary cameras located in classrooms throughout the institution.

This study financed by the state of California, is bringing to the screen in its initial stages the educational techniques employed by practicing teachers; engineering experiments for mass audiences; a morning in the life of a school nurse; and a few answers as to what makes us run, as explored by psychologists.

The programs will be telecast into classrooms in the college and appraised simultaneously by as many as 200 students. The appraisals will attempt to find answers to such questions as the following:

1. How effective is TV in teaching? Records will be kept of

the achievements of TV and non-TV students.

2. Does TV instill desirable learning attitudes in the student?

3. Will instructors take to the change?

4. Will the teachers being observed through TV take kindly to the mechanical intrusion?

The present TV study is not the first to be made at San Jose State College. During the past two years the college has been probing TV teaching under a grant from the Fund for the Advancement of Education. However, the current study is the first one for which state money was appropriated and indicates that the state authorities have a wholesome respect for television's educational potential.

The central effort in the present San Jose State study is teacher education instruction. It is estimated that 2,000 prospective teachers will see and hear in their classrooms by means of remote control cameras what is transpiring in the various elementary classrooms selected for demonstration.

ments. Additional test equipment is also listed, where required, for more complex systems when trained maintenance personnel is available.

Appendices at the back of the book list (1) closed circuit TV producers, syndicators, and service

organizations; (2) manufacturers of closed circuit TV equipment; (3) costs of closed circuit TV equipment, services, and applications. There is also a two-page bibliography, a glossary of television terms, and an index.

—CECIL S. BIDLACK

Radio and TV Speech

Continued from page 11

- the script. If this cannot be done, have characters refer to the person who must be introduced later.
- G. Use action or sound words, as "thunder in the night," "the swish of taffeta."
- H. Read the dialogue aloud as you write in order to keep it as conversational as possible.
- XIII. Let the characters advance the story.
- A. Make script realistic by using "throw-away" lines.
- Example:
John: Pass the butter, please.
- B. Give characters certain identifying tricks, such as speech rhythms, characteristic idiom, pet expressions, or other mannerisms.
- XIV. Uses of sound:
- A. Set scene or establish a locale
- B. Project action
- C. Create mood or atmosphere
- D. Achieve climax or extend and intensify the climax
-

About the Authors of "Radio and TV Speech"

Mrs. Ethel Tincher, who teaches radio and television classes in Denby High School, Detroit, is noted for the frequency with which her students take top honors in the *Scholastic Magazine* radio writing contests.

Dr. Edgar E. Willis served for a time on the staff of the Detroit Public Schools radio station, before going on to San Jose State Teachers College and his present position as professor of speech at the University of Michigan.

Edward Stasheff taught in the high schools of New York City for ten years and served on the staff of WNYE, the Board of Education radio station in New York City. He is currently on leave from the Speech Department of the University of Michigan to work with the Educational Television and Radio Center.

- E. Establish time
- F. Indicate entrances and exits
- G. Serve as a transition device
- H. Act as a theme signature or trademark
- I. Contribute to a montage effect
- J. Provide accentuation or emphasis
- K. Provide comedy effect

XV. Tips on Sound

- A. Some sounds are self-identifying:
 - 1. Horses' hoofs
 - 2. Door opening and closing
 - 3. Telephone dial
 - 4. Train whistle
 - 5. Tinkle of glassware and silver
 - 6. Fog horn
 - 7. Doorbell
 - 8. Angry crowd
 - 9. Wind blowing
- B. Some sounds need identification:
 - 1. Rain
 - 2. Factory noises
 - 3. Automobile
 - 4. Train
 - 5. Waterfall
 - 6. Thunder
 - 7. Airplane

XVI. Transition devices (bridges):

- A. Outline on paper the complete course of conflict with final clash when some kind of decision is made.
- B. Conflict between protagonist and antagonist can be —
 - 1. Between man and man
 - 2. Opposing ideas and philosophies
 - 3. Man against nature

- 4. Man against himself
- 5. Man against society
- C. Write a brief synopsis of each scene.
- D. You may need a confidant for both the protagonist and the antagonist to avoid having characters talk to themselves.

XVII. Utilize suspense. The seesaw of power builds interest.

XVIII. Use simple plots for radio.

- A. Avoid use of sub-plots.
- B. Build to a definite climax.
- C. The denouement should be clear, brief, and *credible*.

XIX. Revise, condense, and re-write as many times as necessary to get a good script.

● Writing a Speech for Radio

I. Problems:

- A. The speaker cannot be seen.
- B. The speaker must depend upon his voice and his speech content.
- C. The audience listens in small units, usually a home situation.
 - 1. Therefore, crowd psychology is not effective.
 - 2. Social pressure is absent.
 - 3. There are probably many distractions.
 - 4. The content and delivery of speech must be suitable for the living room.
- D. Time limits are inflexible.

II. The conditions of the radio speaking situation govern the style of the speech.

- A. The style must be personal.
- B. The style must be simple.

- C. Because the ear alone has a short memory and because the speaker cannot see his audience to gauge their understanding, the organization of material must be very clear, logical, simple, and repetitive.
- D. Information should be concrete.
- E. Because people may tune in late, the speech should have a good summary.

III. Timing of the speech is very important.

- A. One's normal reading rate should be determined. (Average is 150 words a minute.)
- B. Time should be allowed for announcer's introduction and conclusion.
- C. If other public service announcements are made within your time limit, check the exact time of those announcements and deduct it from your speech.
- D. Write the last two sections in short "takes" which allow for provisional cutting.

IV. General suggestions:

- A. There must be a real purpose behind the talk.
- B. The content must have general interest and appeal.
- C. The speech must be written in conversational style.
- D. It must be written in simple language. Avoid four and five syllable words.
- E. The sentence structure must be simple.

- F. It must catch the attention of the audience immediately. Remember it is very easy to switch stations!
- G. Contractions and colloquialisms help make a speech sound conversational.
- H. The script must be timed to the exact second. Leave the conclusion intact. If provisional cuts are to be made, make them before the conclusion.

● Rules for Radio and TV News Writing

I. Use plain talk or conversational style.

- A. Use the simple word.
- B. Use the concrete word rather than the abstract.
- C. Use the familiar word, rather than the unfamiliar.
- D. Use simple sentence structure (subject, predicate, object).
- E. Don't back into sentences like "Married, he lived with his wife."
- F. Get rid of empty words and syllables.
- G. Don't dispense with prepositions.
- H. Don't use too many adjectives. They clutter the story.
- I. Keep sentences short (20 to 25 words).
- J. Use action verbs. Let them substitute for adverbs whenever possible.
- K. Don't be afraid to repeat names.
- L. In the lead of the story it is *not* necessary to get all the news "W's."

- M. Use the present tense only if the story is happening while you are actually on the air.
 - N. All right to use the word "today," if not used too often.
 - O. Beware of words which sound alike but have different meanings: raise, raze; feet, feat; hair, hare.
 - P. Try to avoid alliteration.
 - Q. Avoid tongue twisters.
- II. Mechanics of news writing:
- A. Always triple space copy.
 - B. Keep copy clean.
 - C. Never run a sentence from one page to another.
 - D. Try to avoid running a story from one page to another.
 - E. Never abbreviate, except for "Mr., Mrs., Dr."
 - F. Write out the word, "dollar"; don't use the dollar sign symbol (\$).
 - G. Write out numbers one through ten.
- 1. From 11 to 1,000 use figures.
 - 2. Write numbers over 1,000 like this: "5 billion," etc.
 - H. Eliminate most punctuation marks except for periods and commas. Avoid using the colon and semi-colon.
 - I. Circle all copy instructions so announcer won't read them aloud. In case of an item about a death, write "Death" at the top and circle it.
 - J. Number pages, beginning with page one, at bottom of page. Circle each page number.
 - K. Use either the word "More" when story is continued on next page, or use arrows at both bottom of page and top of next.
 - L. To designate the end of one story and the beginning of another use this symbol: //.
 - M. At the end of the news copy, use this mark: #.

The Second Oldest

Continued from page 11

everyday social problems of growing up. It was written after extensive research in a large number of classrooms by a committee of school social workers.

● TYPICAL of the 27-year history of unique commercial station cooperation with KBPS and

the Portland Public Schools, the carefully teacher-social worker researched episodes are written into dramatic form by Henry Norton, continuity and traffic manager of station KGW, Portland's ABC radio outlet. Featuring a cast of talented public high school drama

students, the scripts are recorded in the KGW studios under the supervision of Mr. Norton and KBPS Producer Fred Warner. The series is aired by both KBPS and KGW.

No in-school series is offered without a program-summary guide-booklet to accompany it, and KBPS has gratefully reproduced and distributed all the manuals which accompany the NAEB in-school series; it also proudly beams to Portland classrooms. Radio coordinators in each of Portland's nearly 100 schools assist fellow teachers with the utilization of these radio program curriculum resource materials, as well as encourage them to bring to KBPS for broadcast, original programs prepared as outgrowths of regular classroom work.

After-school hours at KBPS hum with activity as students from all of the city's eleven high schools converge on the station to write, prepare, or broadcast a teenage program for teenagers. Such after-school broadcasts provide a wide range of creative opportunities for boys and girls from all schools. These young broadcasters are chosen by citywide audition for KBPS dramatic roles, for news-casting, announcing, sportscasting, classical music narration, and pop music "d. j." berths. The KBPS High School Advisory Council (two representatives from each of the eleven high schools) meets bimonthly to discuss and plan new series specifically for the teenage listener. The current council pro-

ject is a new series dramatizing the features of Oregon's new Youth Code as it would apply if and when adopted by Portland high school student-body groups.

● EACH YEAR several KBPS student staff members "graduate" into commercial radio and television station work. At present eleven of these young people, five of them still in high school, are working after school and weekends in the industry.

KBPS, Portland's "second oldest," has long served as a communications threshold for many of the city's adult education and cultural groups. The Portland Art Museum, the Civic Theater, League of Women Voters, Mental Health Association, the Portland Council of Parents and Teachers, the American Association of University Women, and the Portland Junior Symphony are but a few of those actively broadcasting regular series. The newest KBPS adult series is in the field of geriatrics. Entitled *The Challenging Years*, planned and narrated by Mrs. Clifford E. Zollinger, president of Oregon Senior Craftsmen and Portland's Woman of the Year for 1958, the bimonthly discussion series is presented to help senior citizens and their families. The well-received programs are co-planned by the Community Council's Committee on Services to the Aging.

A member of NAEB for a decade, the affiliation began when KBPS was a quarter of a century old (the writer was recruited by the

then President Richard Hull). The station has been proud to share with its community during the late afternoon and evening hours many of NAEB's distinguished adult series.

TV raised one of its challenging heads in rehearsals held in the KBPS studios for 15 weeks last spring, when the Portland Public Schools pioneered in Oregon with a series of in-school telecasts to the elementary school classrooms of the city and surrounding viewing area. KGW-TV, Channel 8, (ABC) telecast these experimental programs which were planned and prepared in exactly the same manner KBPS committees of teachers and subject-area supervisors have planned and prepared classroom radio series over the years. The writer was responsible for production of four in-school series.

The KBPS adult staff of six — traffic secretary, station secretary, transmitter operator, engineer, pro-

ducer, and manager — which supervises its eager-beaver crew of student helpers, each one ready "to do or die" in his particular job in this 35-year-old AM radio station, has its collective hands very full each school day of people, programs, and problems. Said to be originating more live programs with more live people per day than any other station in the city, KBPS is not a calm place of business. But what business is calm today — especially in education — and the challenge of educational broadcasting in a world of beeping satellites is greater than ever. KBPS, Portland's "second oldest," faces its 36th year more determined than ever to help young people to better understand the techniques of "peoples speaking to peoples," and the high responsibility broadcasting holds in its dynamic relationship to an informed and articulate citizenry.

The School and Commercial TV

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vision, "the number of hours a viewer can spend profitably viewing good television programs, if he exercises discrimination, is probably greater than the time he can spend in seeing good new films, or reading worthwhile fiction in current magazines. But if he watches TV three hours every night, its

treasurers will be readily submerged."

● IT SEEMS EVIDENT that discriminating viewers are badly needed. And the question arises as to how discrimination is taught. Here are a few suggestions: Let students report on programs best

liked and least liked, giving reasons for their choices. Let them sample programs recommended by fellow students or others. Have them contrast and evaluate styles of commentators, selecting those appealing primarily to the emotions and those placing dependence upon facts and reasoning for their judgments. Other devices will come readily to mind.

Next we come to the question as to how one distinguishes between "discrimination" and "taste." Robert Underwood Johnson pointed out a long time ago that "Taste is discrimination many times exercised." Good taste, to state it in another way, is the ultimate result of the practice of continuous discriminating selection.

The cultivation of good taste necessitates the availability of a wealth of excellent materials. Since taste exists at all levels, exposure must begin at a lower level and progress to successively higher levels. This insures that the initial selec-

tions made will be enjoyable, and leads to a desire for additional experiences. In this process there will come a time when there will be the urge to create as well as to enjoy. Teachers must be ready to provide for this essential need.

Developing discrimination and cultivating good taste is the best answer education can give to the mediocre or tawdry in the mass media. Is the producer justified in arguing that the consumer gets what he wants? Is this not a dangerous philosophy? Does it not justify doing less than our best either as consumers or producers of excellence? Excellence is available to all of us, whether we deserve it or not. What we as teachers do in our schools in creating a demand for excellence will determine, in the long run, whether America's experiment in popular culture will succeed in lifting the level of appreciation or degrading it to a brave new world of barbarism.

—TRACY F. TYLER, *Editor*

Teachers Meet via TV

Continued from page 8

schools, 95 per cent favored the television courses, 1.8 per cent preferred other meetings, and 3.6 per cent stated preference.

The twelve programs of the win-

ter quarter included the following courses:

Business Education for Teachers—designed for business education teachers. It was exploratory in nature and was planned

to be suggestive of a possible television in-service course for the fall semester in 1958. The consultant in business education and a certified public accountant made this presentation.

Using Radio and Television in the Classroom — three programs, designed to help teachers use radio and television more effectively. Participants in this series included the consultants in radio-television, classroom teachers who had used television successfully in their classes, and the editor of the *NAEB Journal*. No survey was made on this in-service course, but letters and comments from principals indicated it helped to bring about a more effective use of television in the schools. Some principals have requested that the course be repeated next year.

Fourth-Grade Mental Ability Testing — two programs, designed to give instructions to all fourth-grade teachers in giving, scoring, and recording a different mental test from the one they had been using.

Using Test Results for Teachers — two programs, one for lower elementary and one for upper elementary.

The twelve programs of the spring quarter will include these courses:

An introduction to the Health and Physical Education Guide — six programs, one for kindergarten and first grade, and one each for second grade, third

grade, fourth grade, fifth grade, and sixth grade. These programs are designed to introduce a guide which will be ready for the school year 1958-59. Individual programs highlight specific points to be noted on each grade level.

Aviation Series — nine programs: *The Air Age and Education*, *How an Airplane Flies*, *The Airport and the Community*, *Weather and Navigation*, *Air-Age Geography*, *Space and Inter-Planetary Travel*, *Civil Air Patrol and Aviation Education*, *Teaching Materials for Air-Age Education*, and *Placing Aviation in the Classroom*. The consultant in science education, in cooperation with the aeronautical education departments of various universities, the Civil Air Patrol, the Air Force, representatives of industries that are contributing to space travel, and educational directors of commercial air lines, is bringing to this series authorities of national and international renown. On the team producing this series with the consultant in science are representatives of the Minnesota Academy of Science, the State Department of Education, and teachers and principals from the metropolitan area.

This is an in-service course which will be very valuable for teachers of grades four to nine. It is produced by the Radio-Television Department on air time paid for by the Minneapolis Public Schools. The kinescoping of some of these presentations is

being made possible by grants from the Link Foundation and local industrial interests. These kinescopes will be available for use by other educational television stations.

In-service courses on *As Teachers Teach* will be continued next year with some changes. Courses or meetings designed for all teachers will again be given from 3:30 to

4:00 p. m. However, those courses designed only for elementary schools may be given during the noon hour when most elementary schools hold their faculty meetings.

The proof of the pudding is in the eating. Staff members who presented in-service courses over television this year are requesting time again next year. Staff members who did not use time this year are requesting it for next year.

Patronage and the Networks

Continued from page 5

age, number of conditions would be necessary.

The initiative for such a series would have to come from the network. It is unlikely that advertisers or agencies would come to a network seeking time for such a production. The advertiser, the agency, and the network would need to agree to leave all the program decisions in the hands of the producer. A producer with the ability and integrity of a Fred Coe would be essential. The budget would have to be adequate, but not so large that the hiring of top-priced talent could replace imagination and effort. The plan should provide for several years of continuous growth and development.

Within such a framework, an advertiser could achieve substantial prestige and goodwill. The network would be asked to make no sacri-

fice except the possibility of suffering the loss of a few points in the audience ratings. In view of the intense inter-network competition for audience, this probably would be considered a major sacrifice. However, a top-notch dramatic series, even one of serious purpose, doesn't imply non-competitive ratings. Such a series would achieve high ratings if not the top ones. The whole arrangement would provide a realistic system of patronage for genuine dramatic talents.

In the mass media, total dependence upon immediate popular acceptance tends to work counter to optimum artistic growth. Commercial broadcasting has a unique ability to overcome this obstacle, at least in some measure. It seems logical that a slowly maturing industry might accept this opportunity as a part of its responsibility.

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